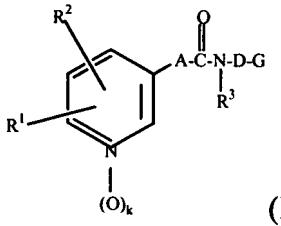
IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-77. (Cancelled)

78. (New) A pyridylalkane, pyridylalkene or pyridylalkine acid amide compound of formula (I)



(I)

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;
R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1;

A is -CH = CH-;

D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy,

C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene,

a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkadienylene,

a substituted C_5-C_{12}-alkadienylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkeninylene,

a substituted C_5-C_{12}-alkeninylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, one to three methylene

units in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NR^7, CO, SO or SO_2, and

C_3-C_{12}-alkylene, wherein, with the exception of the G – terminal methylene group in the C_3-C_{12} alkylene, one to three methylene units in the C_3-C_{12} alkylene are isosterically replaced by O, S, CO, SO, or SO_2;

R^7 is hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_1-C_6-acyl, or C_1-C_6 -alkanesulfonyl;

G is G^1 or G^2 wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^2, R^3, R^4, R^5, R^8, R^9, R^{10}, and ring system $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates.

79. (New) The compound according to claim 78 wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, ethinyl, hydroxy, C_1-C_4-alkoxy, benzyloxy, C_1-C_4-alkylthio, C_2-C_5-alkoxycarbonyl, aminocarbonyl, C_3-C_9-dialkylaminocarbonyl, carboxy, phenoxy, phenylthio, and pyridyloxy;

R^2 is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, C_1-C_4-alkyl, trifluoromethyl, hydroxy, and C_1-C_4-alkoxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_3-alkyl, allyl, hydroxy, C_1-C_3-alkoxy and benzyloxy;

k is 0 or 1;

D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_3-alkyl, hydroxy or phenyl,

C_3-C_{12}-alkenylene,

a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_3-alkyl, hydroxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_3-alkyl, hydroxy or phenyl,

C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, one to three methylene units in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NH, $N(CH_3)$, $N(COCH_3)$, $N(SO_2CH_3)$, CO or SO_2, and

C_3-C_{12}-alkylene wherein one to three methylene units in C_3-C_{12} alkylene are isosterically replaced by O, S, CO or SO_2;

G is selected from the group consisting of G^1 and G^2, wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl, benzocyclobutyl, indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, dioxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, oxodihydrodibenzocyclooctenyl, and tetrahydrodibenzocyclooctenyl;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl,

indanyl, indenyl, oxoindanyl, naphthyl, dihydronaphthyl, tetrahydronaphthyl, biphenylenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocycloheptenyl;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxyl;

G^2 is $=CR^8R^9$

which is bound to D over a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^3, R^8, R^9, R^{10} and $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-

alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy;

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino.

80. (New) The compound according to claim 79 wherein

R^1 is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, hydroxy, C_1-C_4-alkoxy, phenoxy, methylthio, ethylthio, methoxycarbonyl, aminocarbonyl and carboxy;

R^2 is selected from the group consisting of hydrogen, chlorine, methyl, hydroxy, and methoxy;

R^3 is hydrogen;

k is 0;

D is selected from the group consisting of

C_3-C_{10}-alkylene,

a substituted C_3-C_{10}-alkylene which is substituted by methyl, hydroxy or phenyl;

C_3-C_{10}-alkenylene,

a substituted C_3-C_{10}-alkenylene which is substituted by methyl, hydroxy or phenyl,

C_3-C_{10}-alkinylene,

a substituted C_3-C_{10}-alkinylene which is substituted by hydroxy or phenyl,

C_3-C_{10}-alkenylene or C_3-C_{10}-alkinylene, wherein a methylene unit is isosterically replaced by O, NH, $N(CH_3)$, or CO, and

C_3-C_{10}-alkylene wherein a methylene unit is isosterically replaced by O or CO;

G is selected from the group consisting of G^1 and G^2 wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl, indanyl, indenyl, oxoindanyl, naphthyl, tetrahydronaphthyl, fluorenyl, oxofluorenyl, anthryl, dihydroanthryl, oxodihydroanthryl, phenanthryl, dibenzocycloheptenyl, dihydrodibenzocycloheptenyl, and oxodihydrodibenzocyclooctenyl;

R^9 is selected from the group consisting of hydrogen and C_1-C_3-alkyl, benzyl, phenyl, indanyl, indenyl, naphthyl and anthryl;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D over a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substituents R^1, R^3, R^8, R^9, R^{10}, and $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy.

81. (New) The compound according to claim 80 wherein

R^1 is selected from the group consisting of hydrogen, fluorine, methyl, trifluoromethyl and ethylthio;

R^2 is hydrogen;

R^3 is hydrogen;
k is 0;

D is selected from the group consisting of

C_3-C_8-alkylene,

a substituted C_3-C_8-alkylene which is substituted by hydroxy or phenyl,

C_3-C_8-alkenylene,

a substituted C_3-C_8-alkenylene which is substituted by phenyl,

C_3-C_8-alkinylene,

C_3-C_8-alkenylene or C_3-C_8-alkinylene, wherein a methylene unit in the alkenylene or alkinylene is isosterically replaced by O, NH or CO; and

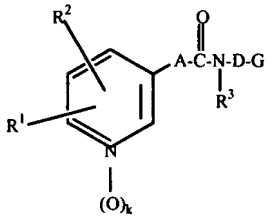
G is selected from the group consisting of
diphenylmethyl, diphenylhydroxymethyl, diphenylmethylene, diphenylethylene, triphenylmethyl, naphthylmethylene, naphthyl, tetrahydronaphthyl, hydroxytetrahydronaphthyl, dihydrodibenzocycloheptenyl, and hydroxydihydrodibenzocycloheptenyl,

and wherein aromatic ring systems in G can be substituted independently from each other by one to three groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino.

82. (New) A compound selected from the group consisting of
N-[8,8-bis-(4-fluorophenyl)-octyl]-3-pyridin-3-yl-acrylamide hydrochloride, N-(8,8-diphenyl-octyl)-3-pyridin-3-yl-acrylamide, N-(8-hydroxy-8,8-diphenyl-octyl)-3-pyridin-3-yl-acrylamide, N-(6-hydroxy-6,6-diphenyl-hexyl)-3-pyridin-3-yl-acrylamide, N-(6,6-diphenyl-hex-5-enyl)-3-pyridin-3-yl-acrylamide, N-(5-hydroxy-5,5-diphenyl-pentyl)-3-pyridin-3-yl-acrylamide, and N-(7-phenyl-heptyl)-3-pyridin-3-yl-acrylamide, or pharmaceutically acceptable salts thereof.

83. (New) A pharmaceutical composition comprising one or more of the compounds according to formula (I) or pharmaceutically acceptable salts of formula (I)



(I)

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1;

A is –CH=CH-;

D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene,

a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_6- alkyl, hydroxy, C_1-C_6-alkoxy or phenyl;

C_5-C_{12}-alkadienylene,

a substituted C_5-C_{12}-alkadienylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkeninylene,

a substituted C_5-C_{12}-alkeninylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, one to three methylene units in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NR^7, CO, SO or SO_2 and

C_3-C_{12} alkylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12} alkylene, one to three methylene units in the C_3-C_{12} alkylene are isosterically replaced by O, S, CO, SO or SO_2;

R^7 is hydrogen, C_1-C_6 alkyl, C_3-C_6-alkenyl, C_1-C_6-acyl or C_1-C_6 alkenesulfonyl;

G is selected from the group consisting of G^1 and G^2 wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^2, R^3, R^4, R^5, R^8, R^9, R^{10}, and in ring $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates.

84. (New) The pharmaceutical composition of claim 83 wherein the composition is provided in a form selected from the group consisting of solid, peroral administrable form as a tablet, capsule, coated tablet, liquid, gastric fluid-resistant preparation, suspension, effervescent tablet, tab or sachet, sustained action form, parenteral depot medicinal form, implant, inhalant, concentrate, powder, rectal administrable emulsion, genital administrable emulsion, transurethral administrable emulsion, liposomal administrable emulsion, lyophilisate, spray, transdermal, salve, emulsion, balm, plaster and mixtures thereof.

85. (New) The pharmaceutical composition of claim 83 wherein a dosage unit for administration includes 0.001 to 5000 mg active ingredient.

86. (New) The pharmaceutical composition of claim 85 wherein a dosage unit for administration includes 0.001 to 4000 mg active ingredient.

87. (New) The pharmaceutical composition of claim 86 wherein a dosage unit for administration includes 0.001 to 3000 mg active ingredient.

88. (New) The pharmaceutical composition of claim 87 wherein a dosage unit for administration includes 0.001 to 2000 mg active ingredient.

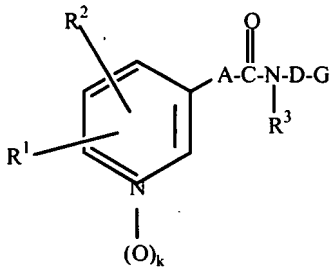
89. (New) The pharmaceutical composition of claim 88 wherein a dosage unit for administration includes 0.001 to 1000 mg active ingredient.

90. (New) The pharmaceutical composition of claim 89 wherein a dosage unit for administration includes 0.01 to 100 mg active ingredient.

91. (New) The pharmaceutical composition of claim 90 wherein a dosage unit for administration includes 1 to 10 mg active ingredient.

92. (New) The pharmaceutical composition of claim 89 wherein a dosage unit for administration includes 1, 2, 5, 10, 20, 25, 30, 50, 100, 200, 300, 400, 500, 600 or 800 mg active ingredient.

93. (New) A method of inhibiting tumor cell growth in a human or animal body comprising administering to the human or animal body in need thereof an amount of a pharmaceutical composition effective for inhibiting tumor cell growth, wherein the method is effective for inhibiting tumors selected from the group consisting of gynecological tumors, ovarian carcinomas, testicle tumors, esophagus carcinomas, stomach cancer, rectal carcinomas, pancreas carcinomas, thyroid cancer, adrenal tumors, leukemia, lymphomas, Hodgkin's disease, CNS tumors, soft-tissue sarcomas, bone sarcomas, benign and malignant mestheliomas, intestine tumors, liver tumors, breast tumors, bronchial and lung carcinomas, melanomas, and benign papillomatosis tumors, wherein the pharmaceutical composition includes compounds of formula (I) or pharmaceutically acceptable salts of formula (I)



(I)

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1;

A is -CH=CH-;

D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene,

a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_6- alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkadienylene,

a substituted C_5-C_{12}-alkadienylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkeninylene,

a substituted C_5-C_{12}-alkeninylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl, and

C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, one to three methylene units in the C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NR^7, CO, SO or SO_2; wherein

R^7 is hydrogen, C_1-C_6 alkyl, C_3-C_6 alkenyl, C_1-C_6 acyl, or C_1-C_6 alkane sulfonyl;

G is selected from the group consisting of G^1 and G^2, wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl, anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl, anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

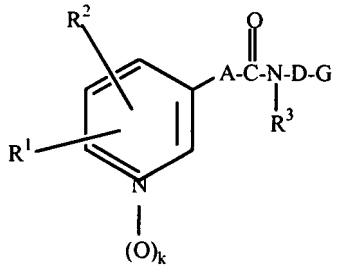
which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^2, R^3, R^4, R^5, R^8, R^9, R^{10}, and $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates.

94. (New) A method of suppressing autoimmune disease in a human or animal body comprising administering to the human or animal body in need thereof an amount of a pharmaceutical composition effective for suppressing autoimmune disease, wherein the pharmaceutical composition includes compounds of formula (I) or pharmaceutically acceptable salts of formula (I)



(I)

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1;

A is CH=CH-;
D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene,

a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_6- alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkadienylene,

a substituted C_5-C_{12}-alkadienylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkeninylene,

a substituted C_5-C_{12}-alkeninylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl, and

C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, one to three methylene units in the C_3-C_{12}-alkylene, C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NR^7, CO, SO or SO_2, wherein

R^7 is hydrogen, C_1-C_6 alkyl, C_3-C_6 alkenyl, C_1-C_6 acyl, or C_1-C_6 alkanesulfonyl;

G is selected from the group consisting of G^1 and G^2, wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl, anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl,

anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

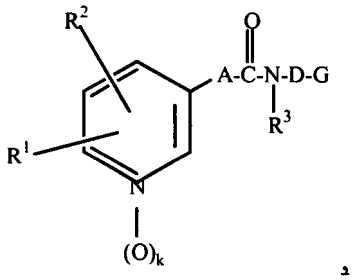
which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^2, R^3, R^4, R^5, R^8, R^9, R^{10}, and $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino;

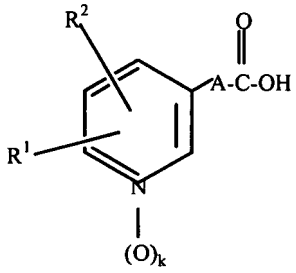
the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates.

95. (New) A method for the production of a compound of formula (I)



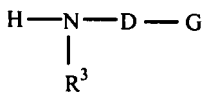
(I)

the method comprising reacting a compound of formula (II)



(II)

with compounds of formula (III)



(III)

in an inert solvent or polar aprotic solvent or solvent mixture or in the presence of auxiliary base in the form of a carbonate or organic amine at a reaction temperature between -40°C and 180°C,

wherein

R^1 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, wherein

R^4 and R^5 are selected independently of each other from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;

R^2 is selected from the group consisting of hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1;

A is -CH = CH-;

D is selected from the group consisting of

C_3-C_{12}-alkylene,

a substituted C_3-C_{12}-alkylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene,
a substituted C_3-C_{12}-alkenylene which is substituted once or twice by C_1-C_6- alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkadienylene,

a substituted C_5-C_{12}-alkadienylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkinylene,

a substituted C_3-C_{12}-alkinylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_5-C_{12}-alkeninylene,

a substituted C_5-C_{12}-alkeninylene which is substituted once or twice by C_1-C_6-alkyl, hydroxy, C_1-C_6-alkoxy or phenyl,

C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, wherein, with the exception of the (G)-terminal methylene group in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene, one to three methylene units in the C_3-C_{12}-alkenylene or C_3-C_{12}-alkinylene are isosterically replaced by O, S, NR^7, CO, SO or SO_2 and

C_3-C_{12} alkylene, wherein with the exception of the G-terminal methylene group in the C_3-C_{12} alkylene, one to three methylene group in the C_3-C_{12} alkylene are isosterically replaced by O, S, CO, SO or SO_2;

R_7 is hydrogen, C_1-C_6 alkyl, C_3-C_6 alkenyl, C_1-C_6 acyl or C_1-C_6 alkanesulfonyl;

G is selected from the group consisting of G^1 and G^2 wherein G must contain at least one aromatic ring, wherein

G^1 is $-(CR^9R^{10})_m-R^8$;

and

m is 0 or 1;

R^8 is selected from the group consisting of benzyl, diphenylmethyl, phenyl,

anellated bi- and tricyclic aromatic or partially hydrogenated carbocyclic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic or a hydrogenated ring and either directly or over a methylene group;

R^9 is selected from the group consisting of hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, benzyl, phenyl,
anellated bi- and tricyclic aromatic ring systems with 8 to 18 ring atoms, and at least one aromatic ring, wherein the linkage can occur over an aromatic ring and either directly or over a methylene group;

R^{10} is the same as R^9, but is selected independently thereof, or is hydroxy;

G^2 is $=CR^8R^9$

which is bound to D by means of a double bond, wherein R^8 and R^9 have the above meaning;

and wherein aromatic ring systems in the substitutents R^1, R^2, R^3, R^4, R^5, R^8, R^9, R^{10}, and $=CR^8R^9$ may be substituted independently from each other by one to three of the same or different groups independently selected from the group consisting of halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_3-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues on the aromatic ring, methylenedioxy; and

wherein alkyl residues in the group G can be substituted by one or two of the same or different groups selected from the group consisting of hydroxy, carboxy, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, amino, mono-C_1-C_6-alkylamino and di-(C_1-C_6-alkyl)amino;

the cis- and trans-isomers, E- and Z-isomers including the corresponding enantiomers, diastereomers and other isomers, the tautomers and their acid addition salts including their hydrates.